

Claim Amendments

1-33. (canceled)

34. (currently amended) ~~The~~ A zinc-containing optical glass ~~according to claim 33, wherein the~~ with a refractive index (n_d) ~~is~~ being in the range of from about 1.60 to about 1.63 and ~~the an~~ Abbe number (v_d) ~~is~~ being in the range of from about 43 to about 47, and said zinc-containing optical glass ~~comprises~~ comprising, on an oxide basis, the composition of:

<u>Material</u>	<u>Percentage</u> <u>by weight</u>
SiO ₂	40 - 47
ZnO	32 - 41
PbO	5 - 14
sum of ZnO+PbO	40 - 48
Li ₂ O	0 - <3
Na ₂ O	0 - 12
K ₂ O	0 - 10
sum of Li ₂ O+Na ₂ O+K ₂ O	≥2
F	0 - 3
MgO	0 - 6

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CaO	0 - <5
SrO	0 - 6
BaO	0 - <0.9
B ₂ O ₃	0 - <1
Al ₂ O ₃	0 - <1.5
ZrO ₂	0 - <2.

35-45. (canceled)

46. (currently amended) ~~The~~ A zinc-containing optical glass ~~according to claim 45, wherein the~~ with a refractive index (n_d) is being in the range of from about 1.54 to about 1.64 and ~~the~~ an Abbe number (V_d) ~~is~~ being in the range of from about 40 to about 52, and said zinc-containing optical glass ~~consists~~ consisting of, on an oxide basis, the composition of:

<u>Material</u>	Percentage <u>by weight</u>
SiO ₂	39 - 54
ZnO	12 - 41
PbO	6 - 22
sum of ZnO+PbO	31 - 52
Li ₂ O	0 - <3

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Na ₂ O	0 - 13
K ₂ O	0 - 11
sum of Li ₂ O+Na ₂ O+K ₂ O	≥2
F	0 - 3
MgO	0 - 6
CaO	0 - <5
SrO	0 - 6
BaO	0 - <0.9
B ₂ O ₃	0 - <1
Al ₂ O ₃	0 - <1.5
ZrO ₂	0 - <2

≥0% by weight of at least one refining agent.

47. (currently amended) ~~The~~ A zinc-containing optical glass ~~according to claim 45, wherein the~~ with a refractive index (n_d) is ~~being~~ in the range of from about 1.56 to about 1.63 and ~~the an~~ Abbe number (V_d) ~~is being~~ in the range of from about 42 to about 52, ~~and~~ said zinc-containing optical glass ~~consists~~ consisting of, on an oxide basis, the composition of:

<u>Material</u>	Percentage <u>by weight</u>
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SiO ₂	40 - 55
ZnO	26 - 41
PbO	1 - 16
sum of ZnO+PbO	31 - 48
Li ₂ O	0 - <3
Na ₂ O	0 - 12
K ₂ O	0 - 10
sum of Li ₂ O+Na ₂ O+K ₂ O	≥2
F	0 - 3
MgO	0 - 6
CaO	0 - <5
SrO	0 - 6
BaO	0 - <0.9
B ₂ O ₃	0 - <1
Al ₂ O ₃	0 - <1.5
ZrO ₂	0 - <2

≥0% by weight of at least one refining agent.

48. (currently amended) ~~The~~ A zinc-containing optical glass according to claim 45, wherein the with a refractive index (n_d) is being in the range of from about 1.60 to about 1.63 and ~~the~~ an Abbe

number (V_d) is being in the range of from about 43 to about 47, ~~and~~
said zinc-containing optical glass ~~consists~~ consisting of, on an oxide
basis, the composition of:

<u>Material</u>	<u>Percentage</u> <u>by weight</u>
SiO ₂	40 - 47
ZnO	32 - 41
PbO	5 - 14
sum of ZnO+PbO	40 - 48
Li ₂ O	0 - <3
Na ₂ O	0 - 12
K ₂ O	0 - 10
sum of Li ₂ O+Na ₂ O+K ₂ O	≥2
F	0 - 3
MgO	0 - 6
CaO	0 - <5
SrO	0 - 6
BaO	0 - <0.9
B ₂ O ₃	0 - <1
Al ₂ O ₃	0 - <1.5

ZrO₂

0 - <2

≥0% by weight of at least one refining agent.

49. (currently amended) ~~The~~ A zinc-containing optical glass ~~according to claim 45, wherein the~~ with a refractive index (n_d) ~~is~~ being in the range of from about 1.57 to about 1.59 and ~~the an~~ Abbe number (v_d) ~~is~~ being in the range of from about 48 to about 52, ~~and~~ said zinc-containing optical glass ~~consists~~ consisting of, on an oxide basis, the composition of:

<u>Material</u>	<u>Percentage</u> <u>by weight</u>
SiO ₂	41 - 50
ZnO	30 - 40
PbO	0 - 1
sum of ZnO+PbO	31 - 41
Li ₂ O	0 - <3
Na ₂ O	0 - 11
K ₂ O	0 - 10
sum of Li ₂ O+Na ₂ O+K ₂ O	≥2
F	0 - 3
MgO	0 - 6

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CaO	0 - <5
SrO	0 - 6
BaO	0 - <0.9
B ₂ O ₃	0 - <1
Al ₂ O ₃	0 - <1.5
ZrO ₂	0 - <2

≥0% by weight of at least one refining agent.

50-54. (canceled)

55. (currently amended) ~~The~~ A zinc-containing optical glass ~~according to claim 54, wherein the~~ with a refractive index (n_d) ~~is~~ being in the range of from about 1.54 to about 1.64 and ~~the an~~ Abbe number (V_d) ~~is~~ being in the range of from about 40 to about 52, ~~and~~ said zinc-containing optical glass ~~consists~~ consisting of, on an oxide basis, the composition of:

<u>Material</u>	<u>Percentage</u> <u>by weight</u>
SiO ₂	39 - 54
ZnO	12 - 41
PbO	6 - 22
sum of ZnO+PbO	31 - 52

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Li ₂ O	0 - <3
Na ₂ O	0 - 13
K ₂ O	0 - 11
sum of Li ₂ O+Na ₂ O+K ₂ O	≥2
F	0 - 3
MgO	0 - 6
CaO	0 - <5
SrO	0 - 6
BaO	0 - <0.9
B ₂ O ₃	0 - <1
Al ₂ O ₃	0 - <1.5
ZrO ₂	0 - <2
Cs ₂ O	0 to about 2.5;

0 to about 5% by weight of one member of the group and combinations thereof: Rb₂O, La₂O₃, Y₂O₃, and GeO₂;

≥0% by weight of a coloring component; and

≥0% by weight of at least one refining agent.

56. (currently amended) ~~The~~ A zinc-containing optical glass ~~according to claim 54, wherein the~~ with a refractive index (n_d) is ~~being~~ in the range of from about 1.56 to about 1.63 and ~~the~~ an Abbe

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number (V_d) is being in the range of from about 42 to about 52, and said zinc-containing optical glass ~~consists~~ consisting of, on an oxide basis, the composition of:

<u>Material</u>	<u>Percentage</u> <u>by weight</u>
SiO ₂	40 - 55
ZnO	26 - 41
PbO	1 - 16
sum of ZnO+PbO	31 - 48
Li ₂ O	0 - <3
Na ₂ O	0 - 12
K ₂ O	0 - 10
sum of Li ₂ O+Na ₂ O+K ₂ O	≥2
F	0 - 3
MgO	0 - 6
CaO	0 - <5
SrO	0 - 6
BaO	0 - <0.9
B ₂ O ₃	0 - <1
Al ₂ O ₃	0 - <1.5

ZrO₂ 0 - <2

Cs₂O 0 to about 2.5;

0 to about 5% by weight of one member of the group and combinations thereof: Rb₂O, La₂O₃, Y₂O₃, and GeO₂;

≥0% by weight of a coloring component; and

≥0% by weight of at least one refining agent.

57. (currently amended) ~~The~~ A zinc-containing optical glass ~~according to claim 54, wherein the~~ with a refractive index (n_d) is ~~being~~ in the range of from about 1.60 to about 1.63 and ~~the an~~ Abbe number (V_d) is ~~being~~ in the range of from about 43 to about 47, and said zinc-containing optical glass ~~consists~~ consisting of, on an oxide basis, the composition of:

<u>Material</u>	<u>Percentage</u> <u>by weight</u>
SiO ₂	40 - 47
ZnO	32 - 41
PbO	5 - 14
sum of ZnO+PbO	40 - 48
Li ₂ O	0 - <3
Na ₂ O	0 - 12

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K ₂ O	0 - 10
sum of Li ₂ O+Na ₂ O+K ₂ O	≥2
F	0 - 3
MgO	0 - 6
CaO	0 - <5
SrO	0 - 6
BaO	0 - <0.9
B ₂ O ₃	0 - <1
Al ₂ O ₃	0 - <1.5
ZrO ₂	0 - <2
Cs ₂ O	0 to about 2.5;

0 to about 5% by weight of one member of the group and combinations thereof: Rb₂O, La₂O₃, Y₂O₃, and GeO₂;

≥0% by weight of a coloring component; and

≥0% by weight of at least one refining agent.

58. (currently amended) ~~The~~ A zinc-containing optical glass ~~according to claim 54, wherein the~~ with a refractive index (n_d) ~~is~~ being in the range of from about 1.57 to about 1.59 and ~~the~~ an Abbe number (V_d) ~~is~~ being in the range of from about 48 to about 52, and said zinc-containing optical glass ~~consists~~ consisting of, on an oxide

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basis, the composition of:

<u>Material</u>	<u>Percentage</u> <u>by weight</u>
SiO ₂	41 - 50
ZnO	30 - 40
PbO	0 - 1
sum of ZnO+PbO	31 - 41
Li ₂ O	0 - <3
Na ₂ O	0 - 11
K ₂ O	0 - 10
sum of Li ₂ O+Na ₂ O+K ₂ O	≥2
F	0 - 3
MgO	0 - 6
CaO	0 - <5
SrO	0 - 6
BaO	0 - <0.9
B ₂ O ₃	0 - <1
Al ₂ O ₃	0 - <1.5
ZrO ₂	0 - <2
Cs ₂ O	0 to about 2.5;

0 to about 5% by weight of one member of the group and combinations thereof: Rb_2O , La_2O_3 , Y_2O_3 , and GeO_2 ;

$\geq 0\%$ by weight of a coloring component; and

$\geq 0\%$ by weight of at least one refining agent.

59-64. (canceled)

65. (new) The zinc-containing optical glass according to claim 46, wherein:

the light transmission of the glass, determined at a wavelength of 400 nm and a 25 mm specimen thickness, is at least about 0.98;

up to a total of about 1% by weight of said at least one refining agent is present; and

said at least one refining agent is at least one member of the group and combinations thereof: As_2O_3 and Sb_2O_3 .

66. (new) The zinc-containing optical glass according to claim 47, wherein:

the light transmission of the glass, determined at a wavelength of 400 nm and a 25 mm specimen thickness, is at least about 0.98;

up to a total of about 1% by weight of said at least one refining agent is present; and

said at least one refining agent is at least one member of the

group and combinations thereof: As_2O_3 and Sb_2O_3 .

67. (new) The zinc-containing optical glass according to claim 48, wherein:

the light transmission of the glass, determined at a wavelength of 400 nm and a 25 mm specimen thickness, is at least about 0.98;

up to a total of about 1% by weight of said at least one refining agent is present; and

said at least one refining agent is at least one member of the group and combinations thereof: As_2O_3 and Sb_2O_3 .

68. (new) The zinc-containing optical glass according to claim 49, wherein:

the light transmission of the glass, determined at a wavelength of 400 nm and a 25 mm specimen thickness, is at least about 0.98;

up to a total of about 1% by weight of said at least one refining agent is present; and

said at least one refining agent is at least one member of the group and combinations thereof: As_2O_3 and Sb_2O_3 .

69. (new) The zinc-containing optical glass according to claim 55, wherein the light transmission of the glass, determined at a wavelength of 400 nm and a 25 mm specimen thickness, is at least

about 0.98.

70. (new) The zinc-containing optical glass according to claim 55, wherein:

up to about 8% by weight of said coloring component is present;
said coloring component is a member of the group and combinations thereof: CuO, Cr₂O₃, CoO, Fe₂O₃, MnO, NiO, and V₂O₅;
and

said zinc-containing optical glass comprises an optical filter.

71. (new) The zinc-containing optical glass according to claim 55, wherein:

up to a total of about 1% by weight of said at least one refining agent is present;

said at least one refining agent is at least one member of the group and combinations thereof: As₂O₃ and Sb₂O₃; and

said zinc-containing optical glass comprises an optical element.

72. (new) The zinc-containing optical glass according to claim 56, wherein:

the light transmission of the glass, determined at a wavelength of 400 nm and a 25 mm specimen thickness, is at least about 0.98;

up to about 8% by weight of said coloring component is present;

said coloring component is a member of the group and combinations thereof: CuO , Cr_2O_3 , CoO , Fe_2O_3 , MnO , NiO , and V_2O_5 ; and

said zinc-containing optical glass comprises an optical filter.

73. (new) The zinc-containing optical glass according to claim 56, wherein:

the light transmission of the glass, determined at a wavelength of 400 nm and a 25 mm specimen thickness, is at least about 0.98;

up to a total of about 1% by weight of said at least one refining agent is present;

said at least one refining agent is at least one member of the group and combinations thereof: As_2O_3 and Sb_2O_3 ; and

said zinc-containing optical glass comprises an optical element.

74. (new) The zinc-containing optical glass according to claim 57, wherein:

the light transmission of the glass, determined at a wavelength of 400 nm and a 25 mm specimen thickness, is at least about 0.98;

up to about 8% by weight of said coloring component is present;

said coloring component is a member of the group and combinations thereof: CuO , Cr_2O_3 , CoO , Fe_2O_3 , MnO , NiO , and V_2O_5 ;

and

said zinc-containing optical glass comprises an optical filter.

75. (new) The zinc-containing optical glass according to claim 57, wherein:

the light transmission of the glass, determined at a wavelength of 400 nm and a 25 mm specimen thickness, is at least about 0.98;

up to a total of about 1% by weight of said at least one refining agent is present;

said at least one refining agent is at least one member of the group and combinations thereof: As_2O_3 and Sb_2O_3 ; and

said zinc-containing optical glass comprises an optical element.

76. (new) The zinc-containing optical glass according to claim 58, wherein:

the light transmission of the glass, determined at a wavelength of 400 nm and a 25 mm specimen thickness, is at least about 0.98;

up to about 8% by weight of said coloring component is present;

said coloring component is a member of the group and combinations thereof: CuO , Cr_2O_3 , CoO , Fe_2O_3 , MnO , NiO , and V_2O_5 ;

and

said zinc-containing optical glass comprises an optical filter.

77. (new) The zinc-containing optical glass according to claim 58, wherein:

the light transmission of the glass, determined at a wavelength of 400 nm and a 25 mm specimen thickness, is at least about 0.98;

up to a total of about 1% by weight of said at least one refining agent is present;

said at least one refining agent is at least one member of the group and combinations thereof: As_2O_3 and Sb_2O_3 ; and

said zinc-containing optical glass comprises an optical element.